

ITEM	UNITS	QUANTITY	UNIT COST	TOTAL UNIT COST	ACCESS CONTINGENCY	TASK COST	DESCRIPTION/ASSUMPTIONS
<u>Capital Costs</u>							
Lead based paint abatement	ft <sup>2</sup>	12,000	\$15.24	\$ 182,880	\$ 91,440	\$ 274,320	Means 25 02 0104. 50% contingency for access.
<b>SUBTOTAL</b>						<b>\$ 274,320</b>	
<u>Indirect Capital Costs</u>							
<b>Health and Safety Implementation - 20%</b>						\$ 54,864	
<b>Overhead and Profit - 20%</b>						\$ 54,864	
<b>Permit Acquisitions - 5%</b>						\$ 13,716	
<b>Contingency Allowance - 25%</b>						\$ 68,580	
<b><u>TOTAL</u></b>						<b><u>\$ 466,344</u></b>	

RMeans' 2004 Environmental Remediation Cost Data – Unit Price and RMeans' 2004 Environmental Remediation Cost Data – Assemblies, were used for certain unit costs estimates as indicated. Costs have been escalated from 2004 to 2011 using a 2.7% inflation rate, based upon the rates published in Appendix C of Circular A-94 Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs (United States Office of Management and Budget, January 2009).

**TABLE 3: Alternative 3: Decontamination, Dismantling, Recycling and Disposal**

ITEM	UNITS	QUANTITY	UNIT COST	TOTAL UNIT COST	ACCESS CONTINGENCY	TASK COST	DESCRIPTION/ASSUMPTIONS
<u>Capital Costs</u>							
<b>VESSEL PREPERATION - DECOMTAMINATION</b>							
Remove/treat non-oily water	gal.	500000	\$ 0.07	\$ 35,955		\$ 35,955	Means 16 01 9023.
Pumping equipment	each	1	\$ 1,203	\$ 1,203		\$ 1,203	Means 33 01 0508.
Carbon Filter	each	1	\$ 11,043	\$ 11,043		\$ 11,043	Means 33 13 2021.
<b>VESSEL PREPERATION - TRANSPORT PREPARATION</b>							
Engineering/Inspections	Hrly.	60	\$ 125	\$ 7,500		\$ 7,500	T&T Bisso.
Deck and superstructure preparation	Day Rate	3	\$ 5,500	\$ 16,500		\$ 16,500	T&T Bisso.
Below Deck preparation	Day Rate	3	\$ 5,500	\$ 16,500		\$ 16,500	T&T Bisso.
Hull preparation	Day Rate	3	\$ 5,500	\$ 16,500		\$ 16,500	T&T Bisso.
Tow preparation/floats/rigging	Day Rate	1	\$ 5,500	\$ 5,500		\$ 5,500	T&T Bisso.
<b>VESSEL - TRANSPORT</b>							
Tugs (3)	Hrly.	90	\$ 1,900	\$ 171,000		\$ 171,000	Assumes Dry Dock is within 30 hours of tug time. T&T Bisso.
Pilots	Est Tariff	1	\$ 5,000	\$ 5,000		\$ 5,000	T&T Bisso.
<b>VESSEL DISPOSAL</b>							
Dry Dock	mo.	3	\$ 150,000	\$ 450,000		\$ 450,000	
Remove electrical wiring	LF	50	\$ 10.34	\$ 517	\$ 517	\$ 1,034	Assumed 60 pounds of insulated #12 wire with jacket. 100% contingency used based on the quantity estimate. 100% contingency used based on the quantity estimate. Assumed Non-friable ACM. Wire/conduit weight estimated from: <a href="http://www.muskaelectric.com/tools/conduit-and-wire-weight-calculator">http://www.muskaelectric.com/tools/conduit-and-wire-weight-calculator</a> . Means 33 19 0204. Means 33 19 9534.
Transport Drums	mile	100	\$ 2.00	\$ 200		\$ 200	Means 33 19 0204.
Incineration of PCB waste	Drum	1	\$ 97.59	\$ 98		\$ 98	Means 33 19 9534.
Remove/dispose solid/hazardous waste (2000 lbs.)							Assumes material is already drummed.
Drummed Waste Shipment Charge	each	1	\$ 2,801.39	\$ 2,801	\$ 2,801	\$ 5,603	Means 33 19 0201. Assumes 100% contingency for loading.
Transport Drums	mile	100	\$ 2.00	\$ 200		\$ 200	Means 33 19 0204.
Landfill Hazardous Waste 55-Gal Drums	each	3	\$ 117.49	\$ 352		\$ 352	Means 33 19 7202.
Remove/dispose PCB paint	ft²	12,000	\$ 15.24	\$ 182,938		\$ 182,938	Means 25 02 0104. 6 rooms at 2000 sq.ft./room. CCS cost estimate with 100% access contingency. Disposal 6 drums of chips @ 218/drum (11/10/2009 briefing est.)
Remove Foam	cf	111,113	\$ 16.71	\$ 1,856,690		\$ 1,856,690	CME, Inc. estimate of foam volume (10/9/2008). Allied Defense Recycling, LLC, foam removal quote.
Recycle/dispose superstructure	ton	2,400	\$ (350)	\$ (840,000)		\$ (840,000)	Credit for recycle steel.
Dismantle vessel	Day Rate	50	\$ 15,000	\$ 750,000		\$ 750,000	Labor and equipment BD&\$ quote.
Crain Rental	Hrly.	42	\$ 250	\$ 10,500		\$ 10,500	Labor and equipment BD&\$ quote.
Barge/Tug/Light Crane/Crew	Day Rate	30	\$ 1,000	\$ 30,000		\$ 30,000	Used to provide access/storage for vessel preparation. Equipment/Manpower verbal estimate Ryba Marine (3/1/11).
<b>SUBTOTAL</b>						<b>\$ 2,734,317</b>	
<u>Indirect Capital Costs</u>							
<b>Health and Safety Implementation - 10%</b>						\$ 273,432	
<b>Overhead and Profit (Means Costs Only) - 20%</b>						\$ 418,856	
<b>Permit Acquisitions - 0%</b>						\$ -	
<b>Contingency Allowance - 25%</b>						\$ 683,579	
<b><u>TOTAL</u></b>						<b><u>\$ 4,110,184</u></b>	

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